



INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group
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Date of Inspection: Wednesday, May 11, 2022
Date of Report: Thursday, May 26, 2022
USDA Forest Service Inspector: Casey Loofbourrow

Ranger District: Juneau Ranger District
Weather Conditions: Sunny. Temperature: mid 50's °F.

Exploration in accordance with operating plan	Not Applicable
Timber removal following timber sale contract	Not Applicable
BMPs for erosion control	Satisfactory
Water Quality BMPs	Satisfactory
Public safety & fire prevention	Satisfactory
Reclamation work adequate and timely	Satisfactory
Road maintenance adequate and current	Satisfactory
Tails placement in accordance with plan	Satisfactory
Waste Rock placement in compliance	Satisfactory
Company supervision of operation	Satisfactory
Operating in a clean and orderly manner	Satisfactory

Any conditions noted as UNSATISFACTORY will require follow up action by the Mine Inspector and a written memorandum to the operator, outlining the necessary work.

Any conditions noted as Requires Action will require attention from the operator and suggestions for necessary work are listed below

Transportation to and from the mine was provided by Alaska Seaplanes.

Pete Strow (Coeur Senior Environmental Coordinator) accompanied Casey Loofbourrow (Geologist) Pat Dryer (Hydrogeologist), and Richard Dudek (Geologist) of the USFS Tongass Minerals Group.

***This inspection was conducted in part to comply with the requirement of the Plan of Operations Amendment 1 (POA1) Record of Decision (ROD) signed February 24, 2022, to conduct quarterly BMP-focused inspections. This inspection was completed with a focus on the condition and functionality of stormwater and sediment control BMPs following the winter season, when those features are commonly in need of repair and in a stressed condition following snow removal activities and spring snow melt.**

Sites visited during the inspection included: Access roads, Comet waste rock storage area, Comet Water Treatment Plant (CWTP), Sherman Creek Outfall 001, Pit 4, Pit 6, the Tailings Treatment Facility (TTF) and access road, the "mud dump", the Slate Cove port facility, and the Fuel Depot.

STATUS OF PENDING ACTION ITEMS FROM PREVIOUS INSPECTIONS:

ID	Action Item	Status
183-2	ARD seepage at the TTF SE abutment.	Pending. This site was recently exposed by snow melt and Coeur plans to apply shotcrete in the

		near future to reduce oxidation of the ARD-producing outcrop. ARD generated at this location is collected and treated at the Seep Water Treatment Plant.
188-1	Kensington access road guard rails are damaged and need to be replaced.	Pending. Coeur plans to fix guardrails once materials are available.

NEW ACTION ITEMS:

NEW ACTION ITEM 189-1: Fine sediments mucked from TTF Access Road BMPs should be permanently disposed of in an authorized location, i.e., underground.

NEW ACTION ITEM 189-2: Silt fencing below the No Name Creek and Upper Sherman Creek bridges should be removed.

NEW ACTION ITEM 189-3: Surface flow from exploration drill hole should be appropriately mitigated.

STORMWATER BMPs

Stormwater/sediment BMPs were inspected at the Wolf Coarse Pond (Photo 1), the TTF access road (Photos 2-6), Bridge 2 (Photos 7-8), the Mud Dump (Photo 9-11), and the lower laydown area (Photo 12).

BMPs appeared to be in good condition and were accomplishing their purpose of preventing fine sediments from reaching and impacting surface waters and the environment.

NEW ACTION ITEM 189-1: Along the TTF Access Road, there are several stormwater BMPs (Photos 4-6) designed to capture fine sediments transported by flow along the road surface. It appeared the sediments removed from these sumps were mucked onto the adjacent road berms. This practice puts fine sediments in a location where they will readily be transported back onto the road surface and into the BMPs, increasing the necessary maintenance frequency of these BMPs. It is recommended that Coeur dispose of these sediments in a more permanent manner in an authorized location to increase the long term effectiveness and reduce the required maintenance of these BMPs.

ACCESS ROADS

Access road surfaces appeared in good condition. Maintenance of stormwater BMP's can be improved as discussed in the previous section.

COMET DEVELOPMENT PILE

The slopes of the Comet waste rock storage area appear stable (Photo 13). There has been no recent waste rock placement at this site.

COMET WATER TREATMENT PLANT (CWTP)

The CWTP was treating approximately 1,640 gallons per minute (gpm). During the site visit, Pond 1 (Photo 14) was receiving water from the underground mine and Pond 2 was being dredged (Photo 15).

White material was not observed on the test rocks used for monitoring in the CWTP (Photo 16). Coeur continues to add Z-Clear flocculant into the underground sumps in an effort to facilitate removal of drill



polymers used underground when that water is treated at the CWTP. Coeur believes those polymers may contribute to the white material observed intermittently on substrate in Sherman Creek adjacent to Outfall 001.

SHERMAN CREEK OUTFALL

No white material was observed at Outfall 001, where treated water from the CWTP is discharged through a manifold and multiple outlet hoses (Photo 17).

UPPER SHERMAN CREEK BRIDGE AND NO NAME CREEK BRIDGE

These bridges and abutments appeared in stable and orderly condition.

NEW ACTION ITEM 189-2: Silt fencing is present at both bridges (Photos 18-19). This fencing was installed during construction activities to reduce fine sediment discharge to the streams. The stream banks appear stabilized and/or revegetated to the extent that the silt fencing no longer serves a beneficial purpose and could become a source of debris if left in place. The silt fencing should be removed and disposed of.

PIT 4/PUG PLANT

The Pug Plant (Photo 20) was operational and processing graphitic phyllite stockpiled in Pit 4 (Photo 21) for backfilling underground.

NEW ACTION ITEM 189-3: Diamond core exploration drilling is currently being conducted in Pit 4 (Photo 22). The drill hole appears to have intercepted groundwater which is discharging to the surface. Coeur should ensure that drill hole(s) are reclaimed and plugged in compliance with 18 AAC 80, and the "Alaska Best Management Practices, for Maintaining or Decommissioning Water Wells and Boreholes", which includes measures specific to holes that encounter artesian flow. This location will be monitored until it has been documented that the surface flow from the borehole has ceased.

PIT 7

Coeur has transported and stored waste rock from the Kensington development at Pit 7 (Photos 23-24). Coeur intends to use this material as fill for POA1 Stage 4 dam construction.

TAILINGS TREATMENT FACILITY (TTF) AREA

The water level for the TTF was 717.55 feet.

The TTF has mostly thawed, and tailings were being deposited in the northeast area of the TTF. The TTF dam face was free of debris (Photo 25).

The TTF dam spillway did not appear to have been contacted by ARD drainage from the adjacent graphitic phyllite bedrock (Photo 26). In 2021 Coeur completed construction of a concrete raise to the edge of the spillway in an effort to capture and direct ARD to the seepage collection sump where it is transported to the ARD Seep WTP.

The TTF water treatment plant was treating 1,150 gpm.

Pending action item 183-2: This area has recently been uncovered by melted snow. ARD seepage is still visible (Photo 27). This seepage is ultimately collected and treated at the Seep Water Treatment Plant,

but Coeur plans to shotcrete this area to minimize oxidation of the ARD-generating outcrop out of an abundance of caution. No impacts to the environment are expected from this seep.

Good housekeeping practices were observed inside the TTF water treatment plant (Appendix 4g BMP plan; Table 4-1).

MARINE PORT FACILITY AND FUEL DEPOT

The fuel depot was in good condition with no sheen or spills observed (Photo 28).

The stormwater BMPs at the marine port facility were functioning as intended. A culvert identified as needing sediment removal in the previous inspection has been cleaned and is in good condition (Photo 29). Flocculant logs were placed in the ditch to promote settling of suspended sediments from surface runoff (Photo 30) and appeared to be effective as minimal turbidity was observed near the discharging end of the BMPs.

PHOTOS. All photos taken on day of inspection. Additional photos available upon request.



Photo 1. Wolf Coarse Sediment BMPs.



Photo 2. TTF access road stormwater BMP.



Photo 3. TTF access road stormwater BMP.



Photo 4. TTF access road stormwater BMP. Fine sediments mucked from sump are visible on the left of the photograph.



Photo 5. TTF access road stormwater BMP.



Photo 6. TTF access road stormwater BMP. Fine sediments mucked from the sump are visible to the left of the photograph.



Photo 7. Bridge 2 stormwater BMPs.



Photo 8. Bridge 2 stormwater BMPs.



Photo 9. Mud dump stormwater BMPs.



Photo 10. Mud dump stormwater BMPs.



Photo 11. Mud dump stormwater BMP outfall.



Photo 12. Lower laydown area stormwater BMPs.



Photo 13. Comet waste rock storage area.



Photo 14. Comet WTP Pond 1.



Photo 15. Comet WTP Pond 2.



Photo 16. Comet WTP white material test rocks.



Photo 17. Outfall 001 Sherman Creek.



Photo 18. No Name Creek and silt fencing that should be removed.



Photo 19. Sherman Creek Bridge and silt fencing that should be removed.



Photo 20. Pit 4, showing covered working pile of graphitic phyllite and Pug Plant used for cementing graphitic backfill for disposal underground.



Photo 21. Graphitic phyllite stockpile at Pit 4.



Photo 22. Drill Rig at Pit 4. Drill collar is indicated by red circle. Water emanating from drill hole and flowing over surface denoted by dotted yellow line.



Photo 23. Top of waste rock stockpiled at Pit 7.



Photo 24. Looking from top of waste rock stockpiled at Pit 7 down towards the TTF access road.



Photo 25. TTF dam face.



Photo 26. TTF spillway, showing lack of ARD incursion beyond the new raise.



Photo 27. ARD seep near east buttress of TTF Dam.



Photo 28. Fuel depot.



Photo 29. Slate cove marine facility BMP culvert that was noted as in need of sediment removal in previous inspection.



Photo 30. Slate cove stormwater BMPs.

Thanks to the Kensington Mine for a safe visit.
U.S. Forest Service: /s/ Casey Loofbourrow
